

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Canceled)

Claim 2 (Currently Amended): The method of claim 1, further comprising:
forming a lift-off layer on a second substrate; and
growing the multilayer epitaxial film on the lift-off layer,
wherein the separating step comprises forming grooves on the multilayer epitaxial film so as to reach the lift-off layer and removing the lift-off layer whereby the epitaxial film is separated into the segments.

Claim 3 (Currently Amended): A method for making an array of opto-electronic devices from a multilayer epitaxial film, comprising:
separating the multilayer epitaxial film into a plurality of segments;
transferring the segments to a first substrate; and
confining active regions in the respective segments on the first substrate so that the active regions form the array. ~~The method of claim 1,~~ wherein:
the confining ~~step further comprises;~~ includes implanting ion into the respective segments so as to enclose the active regions.

Claim 4 (Original): The method of claim 3, wherein:
a dose of the ions is not less than 10^{-15} cm^{-2} .

Claim 5 (Currently Amended): A method of making an array of opto-electronic devices from a multilayer epitaxial film, comprising:
separating the multilayer epitaxial film into a plurality of segments;
transferring the segments to a first substrate; and
confining active regions in the respective segments on the first substrate so that the active regions form the array. ~~The method of claim 1,~~ wherein:
the confining ~~step further comprises;~~ includes etching areas other than the active regions in the respective segments.

Claim 6 (Currently Amended): A method for making an array of opto-electronic devices from a multilayer epitaxial film, comprising:
separating the multilayer epitaxial film into a plurality of segments;
transferring the segments into a first substrate; and
confining active regions in the respective segments on the first substrate so that the active regions form the array. ~~The method of claim 1,~~ wherein:
the confining ~~step further comprises;~~ includes depositing contacts on the respective segments.

Claim 7 (Currently Amended): ~~The method of claim 1, further comprising:~~ A method for making an array of opto-electronic devices from a multilayer epitaxial film, comprising:
separating the multilayer epitaxial film into a plurality of segments;
adhering ~~the multilayer epitaxial film~~ the plurality of segments on a tape; and
extending the tape so as to widen pitches between the segments on the tape;

transferring the segments to a first substrate; and
confining active regions in the respective segments on the first substrate so that the
active regions form the array.

Claim 8 (Currently Amended): ~~The method of claim 1, further comprising:~~ A
method for making an array of opto-electronic devices from a multilayer epitaxial film,
comprising:

separating the multilayer epitaxial film into a plurality of segments;
adhering ~~the multilayer epitaxial film~~ the plurality of segments on a first tape;
extending the first tape so as to widen pitches between the segments on the first tape
in a first direction;
transferring the segments from the first tape to a second tape; and
extending the second tape so as to widen pitches between the segments on the second
tape in a second direction;
transferring the segments to a first substrate; and
confining active regions in the respective segments on the first substrate so that the
active regions form the array.

Claim 9 (Original): The method of claim 7, wherein an expanding rate of the tape is
in a range of from 100 % to 500 %.

Claim 10 (Original): A method for making an array of opto-electronic devices from
a multilayer epitaxial film, comprising:

separating the multilayer epitaxial film into a plurality of segments;

transferring the segments to a first substrate; and
implanting ions into the respective segments on the first substrate so as to confine active regions enclosed in areas to which the ions are implanted so that the active regions form the array.

Claim 11 (Currently Amended): The method of claim 10, further comprising:
forming a lift-off layer on a second substrate; and
growing the multilayer epitaxial film on the lift-off layer,
wherein the separating ~~step~~ comprises forming grooves on the multilayer epitaxial film so as to reach the lift-off layer and removing the lift-off layer whereby the epitaxial film is separated into the segments.

Claim 12 (Original): The method of claim 10, wherein:
a dose of the ions is not less than 10^{-15} cm^{-2} .

Claim 13 (Original): The method of claim 10, further comprising:
adhering the multilayer epitaxial film on a tape; and
extending the tape so as to widen pitches between the segments on the tape.

Claim 14 (Original): The method of claim 10, further comprising:
adhering the multilayer epitaxial film on a first tape;
extending the first tape so as to widen pitches between the segments on the tape in a first direction;
transferring the segments from the first tape to a second tape; and

extending the second tape so as to widen pitches between the segments on the tape in a second direction.

Claim 15 (Original): The method of claim 13, wherein an expanding rate of the tape is in a range of from 100 % to 500 %.

Claim 16 (Original): A method for making an array of opto-electronic devices from a multilayer epitaxial film, comprising:

separating the multilayer epitaxial film into a plurality of segments;
transferring the segments to a first substrate; and
confining active regions in the respective segments on the first substrate so that the active regions form the array.

Claim 17 (Currently Amended): The method of claim 16, further comprising:
forming a lift-off layer on a second substrate; and
growing the multilayer epitaxial film on the lift-off layer,
wherein the separating step comprises forming grooves on the multilayer epitaxial film so as to reach the lift-off layer and removing the lift-off layer whereby the epitaxial film is separated into the segments.

Claim 18 (Original): The method of claim 16, further comprising:
adhering the multilayer epitaxial film on a tape; and
extending the tape so as to widen pitches between the segments on the tape.

Claim 19 (Original): The method of claim 16, further comprising:
adhering the multilayer epitaxial film on a first tape;
extending the first tape so as to widen pitches between the segments on the tape in a first direction;
transferring the segments from the first tape to a second tape; and
extending the second tape so as to widen pitches between the segments on the tape in a second direction.

Claim 20 (Original): The method of claim 18, wherein an expanding rate of the tape is in a range of from 100 % to 500 %.

Claim 21 (New): The method of claim 18, wherein an expanding rate of the tape is in a range of from 100 % to 500 %.

Claim 22 (New): The method of claim 5, further comprising:
forming a lift-off layer on a second substrate; and growing the multilayer epitaxial film on the lift-off layer,
wherein the separating comprises forming grooves on the multilayer epitaxial film so as to reach the lift-off layer and removing the lift-off layer whereby the epitaxial film is separated into the segments.

Claim 23 (New): The method of claim 6, further comprising:
forming a lift-off layer on a second substrate; and
growing the multilayer epitaxial film on the lift-off layer,

wherein the separating comprises forming grooves on the multilayer epitaxial film so as to reach the lift-off layer and removing the lift-off layer whereby the epitaxial film is separated into the segments.

Claim 24 (New): A method for making an array of opto-electronic devices from a multilayer epitaxial film, comprising:

separating the multilayer epitaxial film into a plurality of segments at a first pitch;
extending the first pitch to the second pitch which is wider than the first pitch;
transferring the segments to a first substrate at the second pitch; and
confining active regions in the respective segments on the first substrate so that the active regions form the array, after transferring the segments.

Claim 25 (New): The method of claim 24, further comprising:

forming a lift-off layer on a second substrate; and
growing the multilayer epitaxial film on the lift-off layer,
wherein the separating comprises forming grooves on the multilayer epitaxial film so as to reach the lift-off layer and removing the lift-off layer whereby the epitaxial film is separated into the segments.

Claim 26 (New): The method of claim 24, wherein:

the confining further comprises;
implanting ion into the respective segments so as to enclose the active regions.

Claim 27 (New): The method of claim 26. wherein:

a dose of the ions is not less than 10^{-15} cm^{-2} .

Claim 28 (New): The method of claim 24, wherein:
the confining further comprises;
etching areas other than the active regions in the respective segments.

Claim 29 (New): The method of claim 24, wherein:
the confining further comprises;
depositing contacts on the respective segments.

Claim 30 (New): The method of claim 24, wherein:
the extending includes adhering the plurality of segments on a first tape, and
expanding the tape so as to widen pitches between the segments on the tape.

Claim 31 (New): The method of claim 24, wherein:
the extending includes adhering the plurality of segments on a first tape, expanding,
the first tape so as to widen pitches between the segments on the first tape in a first direction,
transferring the segments from the first tape to a second tam and expanding the second tape in
a second direction.

Claim 32 (New): The method of claim 30, wherein an expanding rate of the tape is
in a range of from 100 % to 500 %.